| Ir | ıdex | of ( | Claii | ns |
|----|------|------|-------|----|
|    |      |      |       |    |

| Application | /Control No. |
|-------------|--------------|
|-------------|--------------|

10/784,200

Examiner

Joselynn Y. Sliteris

Applicant(s)/Patent under Reexamination

SHIMIZU, NOBUYOSHI

Art Unit

3616

| <b>√</b> | Rejected |
|----------|----------|
| =        | Allowed  |

| 1 | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| + | Restricted                     |

| N | Non-Elected  |
|---|--------------|
| 1 | Interference |

| A | Appeal   |
|---|----------|
| 0 | Objected |

|          | aim      | Date            |              |                |              |              | $\neg$   | Claim        |                 |          |          |          |              |          |                     | Claim Date |          |               |         |   |     |          |            |           |          | $\neg$  |           |              |               |          |          |          |
|----------|----------|-----------------|--------------|----------------|--------------|--------------|--|--------------|-----------------|----------|----------|----------|--------------|----------|---------------------|------------|----------|---------------|---------|---|-----|----------|------------|-----------|----------|---------|-----------|--------------|---------------|----------|----------|----------|
| 1        |          | -               | г—           |                | _            |              | ate Claim Date                                   |              |                 |          |          |          |              |          |                     | -          |          | <b>3</b> ((1) | Date    |   |     |          |            |           |          |         |           |              |               |          |          |          |
| Final    | Original | 5/1/8           |              |                |              |              |  |              |                 |          | Final    | Original |              |          |                     |            |          | ŀ             |         |   |     | Final    | Original   |           |          |         |           |              |               |          |          |          |
|          | 1        | <i>0</i> ¢<br>÷ | _            | _              | _            |              | _  |              | $\dashv$        | 4        |          | 51       |              | _        | Н                   | _          | _        | +             | +       | - | -   |          | 101        | _         | -        | 4       | $\perp$   | 4            | 4             | 4        | +        | 4        |
|          |          | -               | -            | -              | H            | $\vdash$     | H  | H            |                 |          | $\vdash$ | 52       | -            |          | -                   | $\dashv$   | $\dashv$ | +             | -+-     | + | - 1 |          | 102        | $\dashv$  | +        | +       | +         | +            | +             | +        | $\dashv$ | ᅴ        |
| <u> </u> | 2        | ₩-              | -            | -              | -            | $\vdash$     | _  | Н            |                 |          | -        |          | -            |          | -                   | $\dashv$   | +        | +             | +       |   | -   | <u> </u> |            | $\dashv$  | +        | +       | +         | +            | +             | $\dashv$ | +        | 긕        |
| ├        | 3        | 1               | -            | -              | _            | $\vdash$     |  | Н            | $\dashv$        |          |          | 53       |              |          | $\vdash$            | -          |          | +             | +       | - | -   | ļ        | 103        | $\dashv$  |          | +       | +         | +            | 4             | $\dashv$ | +        | ᆛ        |
| -        | 4        | =               | ļ            |                | <u> </u>     | H            | -  | H            | $\dashv$        | -        | -        | 54       |              |          | $\vdash$            | $\dashv$   | -+       | +             | +       |   | -   | <u> </u> | 104        |           |          | +       | +         | +            | +             |          | $\dashv$ | 긕        |
| ┝        | 5        |                 | H            | _              |              | _            | <u> </u>   | $\vdash$     | $\dashv$        | -        |          | 55       |              | _        |                     | $\dashv$   | 4        | +             | +       |   | -   |          | 105        | _         | -        | +       | 4         | $\dashv$     | -             |          | $\dashv$ | 긕        |
| <b>├</b> | 6        | -               | -            | <del>  -</del> | <del> </del> | $\vdash$     | _  | $\vdash$     | $\dashv$        | -        |          | 56       | _            | -        | $\dashv$            | $\dashv$   | $\dashv$ | +             | +       |   | 1 ! |          | 106        |           |          | +       | 4         | $\dashv$     | 4             | -        | +        | -        |
|          | 7        | <u> </u>        | L            | ├-             | ⊢            | H            | H  | Н            | $\dashv$        | $\dashv$ |          | 57<br>58 | _            | $\vdash$ | $\dashv$            | $\dashv$   | $\dashv$ | +             | +       |   | -   | -        | 107        | $\vdash$  |          | +       | +         | +            | +             | -        | $\dashv$ |          |
| -        | 8        | -               | ⊢            | ⊢              | -            | -            | H  | $\vdash$     | $\dashv$        |          |          | 59       | H            | Н        | -                   | -          | +        | +             | +       | + | - 1 |          | 108        | -         |          | +       | +         | +            |               | -+       | +        | $\dashv$ |
|          | 9        | $\vdash$        | $\vdash$     | ⊢              |              | -            | H  | $\vdash$     | $\dashv$        |          |          |          | H            | _        | $\dashv$            | $\dashv$   | +        | +             |         |   | -   |          | 109        |           |          | +       | +         | $\dashv$     | $\dashv$      | -        | +        | $\dashv$ |
|          |          | ⊢               |              | -              | -            | -            | H  | H            | $\dashv$        | -        | _        | 60       | -            | Н        | $\dashv$            | $\dashv$   |          | +             | +       |   | ┨   |          | 110        | -         | +        | +       | +         | +            | +             | $\dashv$ | $\dashv$ | ᅱ        |
|          | 11       | ┼               | ⊢            | -              | -            | -            | ├  | H            | $\dashv$        | $\dashv$ | -        | 61<br>62 | -            | H        | $\vdash$            | -          |          | -+            | +       |   | 1   |          | 111        | -         | +        | +       | +         | +            | $\dashv$      | $\dashv$ | +        | $\dashv$ |
|          | 13       | -               | _            | ⊢              | ⊢            | -            | ⊢  | H            | $\dashv$        | $\dashv$ | <u> </u> | 63       | -            | Н        | Н                   | -1         | +        | -             |         |   | -   | <u> </u> | 112        |           |          | +       | +         | +            | $\dashv$      | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 14       | ⊢               | <del> </del> | ⊢              | <del> </del> | H            |  | -            | $\dashv$        | $\dashv$ |          |          |              | -        | -                   | -          | -+       | +             | +       | + | -   |          | 113        | -         |          | +       | +         | +            | $\dashv$      | +        | +        | $\dashv$ |
|          | 15       | ┝               | ├            | ⊢              | ├-           | H            | ⊢  | ⊢            | $\vdash$        | $\dashv$ |          | 64<br>65 | -            | H        | $\dashv$            |            | $\dashv$ | +             | +       |   | -   |          | 114<br>115 | _         |          | +       |           |              |               | -        | $\dashv$ | $\dashv$ |
|          |          | ⊢               | <u> </u>     | ⊢              | ⊢            | _            | <del> </del>                                     | <del> </del> | -               | $\dashv$ |          |          |              | _        | $\vdash$            |            | -        | +             | 4       |   | -   |          |            |           |          | +       | +         | $\dashv$     | +             | $\dashv$ | +        |          |
|          | 16       | ├               | <del> </del> | ⊢              | _            | ├            | ├  | -            |                 | $\dashv$ |          | 66       |              |          | $\vdash$            |            | -        | +             | +       |   | -   |          | 116        |           |          | +       |           | -            | -+            | 4        | +        |          |
|          | 17       | ⊢               | ├            | L              | _            | _            | _  | L            |                 | -        | ļ        | 67       |              | _        | Н                   | $\dashv$   | $\dashv$ | +             | +       |   | -   |          | 117        | -         |          | +       | -+        | +            | -             | -        | -+       | $\dashv$ |
| -        | 18       | _               | _            | _              |              |              | _  | _            |                 | _        | -        | 68       | L            | _        |                     | _          | $\dashv$ | +             | +       | _ | -   | ļ        | 118        | $\dashv$  |          |         | 4         | -            | -             | -        | $\dashv$ | ᅴ        |
|          | 19       | -               |              | <del> </del>   | _            | -            | ļ  |              | $\vdash$        | _        | <u> </u> | 69       | <u> </u>     | <u> </u> | -                   | -          | $\dashv$ | +             | +       | - | -   |          | 119        |           | -        | +       | +         | -+           |               | $\dashv$ | $\dashv$ | ᅴ        |
|          | 20       | -               | ├_           | _              | ⊢            | ├            | <u> </u>   |              | $\vdash$        | _        |          | 70       | _            | _        | $\vdash$            |            | $\dashv$ | -             | +       |   | -   | <u> </u> | 120        | $\dashv$  | $\dashv$ | +       | -         | -            | -             | -        | -        | $\dashv$ |
| <u> </u> | 21       | ⊢               | <u> </u>     | _              | <b>!</b> —   | ⊢            | <u> </u>   | _            | $\dashv$        | _        | -        | 71       | _            | _        |                     |            | -        | -             |         |   | -   | <u> </u> | 121        | $\dashv$  | -        | +       | -         | -            | -             | -        | -        | $\dashv$ |
|          | 22       | ₩               | _            | -              | <u> </u>     | <u> </u>     | <u> </u>   | _            | $\vdash$        |          | -        | 72       |              |          | -                   |            | -        | -             | +       |   | -   |          | 122        |           | +        | +       | _         | +            | $\dashv$      | $\dashv$ | $\dashv$ | $\dashv$ |
| <u></u>  | 23       | ├_              | <u> </u>     |                | ├_           | ⊢            | <u> </u>   |              |                 |          |          | 73       | _            | _        |                     |            | 4        | _             | 4       |   | -   | <u> </u> | 123        |           | _        | 4       | -         | 4            | $\dashv$      | $\dashv$ | -        | ᅴ        |
| <u> </u> | 24       | ⊬               | <u> </u>     | _              |              | ⊢            | <u> </u>   |              | -               | _        |          | 74       |              |          |                     | _          | -        | -             | 4       |   | -   | ├—       | 124        |           |          | 4       | -         | -            | 4             | 4        | $\dashv$ | ᅴ        |
|          | 25       | -               | <u> </u>     | <u> </u>       | <u> </u>     | <u> </u>     | _  | L            | _               | _        | <u> </u> | 75       | _            |          | $\sqcup$            |            | -        | 4             | +       | _ | 4   | <u> </u> | 125        |           | -        | +       | 4         | -            | $\dashv$      | 4        | $\dashv$ | $\dashv$ |
|          | 26       | _               | <u> </u>     |                | <u> </u>     | ┡            | ⊢  |              | $\vdash$        | _        |          | 76       |              | _        | ·                   |            | 4        | -             | 4       |   | -   | <u> </u> | 126        |           | _        | 4       | 4         | 4            | 4             | 4        | $\dashv$ | $\dashv$ |
|          | 27       | -               | <u> </u>     |                | L            | <u> </u>     | _  |              |                 | _        |          | 77       |              | _        |                     | _          | -        | -             | 4       | _ | -   | <u> </u> | 127        |           |          | +       |           | 4            | -             | 4        | $\dashv$ | 4        |
|          | 28       | <del> </del>    | _            | -              | <del> </del> | ⊢            | <u> </u>   | _            |                 | _        | ļ        | 78       | _            | _        | _                   | _          | $\dashv$ | 4             | -       |   | -   |          | 128        | -         |          | -       | -         | -            | $\rightarrow$ | 4        | $\dashv$ | ᅴ        |
| -        | 29       | -               | -            | -              | <u> </u>     | ├_           | <u> </u>   | _            |                 |          |          | 79       |              |          | $\vdash \vdash$     |            | +        | +             | -       |   | -   | ├        | 129        |           | _        | - -     |           | 4            | -             | _        | $\dashv$ | ႕        |
|          | 30       | ⊢               | _            | -              | ⊢            | ├            | <u> </u>   | -            | $\vdash$        | _        | _        | 80       | _            | _        | $\vdash$            | -          | +        | -             | 4       |   | -   | <u> </u> | 130        |           |          | 4       |           | -            |               | 4        | $\dashv$ | ᅴ        |
|          | 31       | -               | _            | _              | <u> </u>     | -            | -  | _            |                 |          | ļ        | 81       | _            | _        | $\vdash$            |            | -        | _             | 4       |   | 4   |          | 131        | $\dashv$  | -        | +       |           | $\dashv$     | 4             | -        | $\dashv$ | ᅴ        |
|          | 32       | ├               | <u> </u>     |                | ⊢            | ⊢            | ⊢  | _            | $\vdash$        |          | -        | 82       | _            | _        | $\vdash$            |            | +        | +             | -       |   | -   |          | 132        | $\dashv$  |          | 4       | 4         | 4            | -             | _        | $\dashv$ | ႕        |
|          | 33       | ⊢               | ├            | <del> </del>   | ⊢            | ⊢            | ├-   |              | $\vdash$        |          | <u> </u> | 83       | _            |          |                     | _          | $\dashv$ | +             | -       |   | -   | <u> </u> | 133        |           |          | +       | -         | +            | $\rightarrow$ | $\dashv$ | $\dashv$ | ᅴ        |
| <u> </u> | 34       | -               | ₩            | -              |              | <del> </del> | <del> </del> —                                   | $\vdash$     | $\vdash$        | $\dashv$ | <u> </u> | 84       |              | -        | $\vdash$            |            | -+       | +             | +       | + | -   | <u> </u> | 134        | $\vdash$  | $\dashv$ | +       | +         | -            | -+            |          | $\dashv$ | $\dashv$ |
| <u> </u> | 35       | $\vdash$        | ⊢            | $\vdash$       |              | $\vdash$     |  |              |                 | -        | _        | 85       | $\vdash$     | $\vdash$ | $\vdash \vdash$     | -          | $\dashv$ | +             | +       | + | -   |          | 135        | $\dashv$  | +        | +       | +         | $\dashv$     | -+            | -        | -+       | $\dashv$ |
| <u> </u> | 36       | -               |              |                | $\vdash$     | $\vdash$     | <del>                                     </del> | ⊢            | $\vdash$        | $\dashv$ |          | 86       | $\vdash$     | $\vdash$ | $\vdash \vdash$     | -          | $\dashv$ | +             | 4       |   | -   | <u> </u> | 136        | $\vdash$  |          | +       | +         | +            | $\dashv$      | $\dashv$ | $\dashv$ | $\dashv$ |
| <u> </u> | 37       | -               | ⊢            | ├              | -            | -            | <del> </del>                                     | ⊢            | $\vdash$        | $\dashv$ |          | 87       | <del> </del> | -        | -                   | -          | $\dashv$ | +             | +       | - | -   | <u> </u> | 137        | $\vdash$  | -        | +       | +         | $\dashv$     | -             | -        | $\dashv$ | $\dashv$ |
|          | 38       | ⊢               |              |                | -            |              | <u> </u>   | $\vdash$     | $\vdash$        | $\dashv$ | <u> </u> | 88       |              | -        |                     |            | +        |               | +       |   | -   | ļ        | 138        |           | +        | +       | +         | $\dashv$     | -             | 4        | 4        | $\dashv$ |
| <u></u>  | 39       | -               | ├            | ├              | ├            | <del> </del> | ├  | <del> </del> | -               | _        | -        | 89       | _            | -        | <b>-</b>            | -          |          | +             | +       | - | -   |          | 139        |           |          | +       | +         | 4            | 4             | -        | 4        | ᅴ        |
| <u></u>  | 40       | $\vdash$        | ├            |                | $\vdash$     | $\vdash$     | <del> </del>                                     | $\vdash$     | $\vdash \vdash$ |          |          | 90       | <u> </u>     | $\vdash$ | <b>-</b>            | _          | -        |               | -       | 4 | 4   | <u> </u> | 140        | $\dashv$  | $\dashv$ | $\perp$ | +         | $\downarrow$ | $\downarrow$  | -        | $\dashv$ | _        |
| <u> </u> | 41       | ├-              | ├            | ├              | $\vdash$     | <del> </del> | <del> </del>                                     | $\vdash$     | $\vdash \vdash$ | $\dashv$ | _        | 91       | <u> </u>     | $\vdash$ | Ш                   | _          | +        | -             | +       | - | 4   | <u> </u> | 141        | $\sqcup$  | -        | 4       | 4         | -            | -             | 4        | 4        | $\dashv$ |
| <u></u>  | 42       | $\vdash$        |              | -              | <u> </u>     | <del> </del> | <del> </del>                                     | $\vdash$     | Н               | $\dashv$ | _        | 92       | -            |          | Н                   |            | $\dashv$ | -             | +       | + | 4   | <u> </u> | 142        |           | +        | +       | +         | $\dashv$     | _             | 4        | $\dashv$ | 4        |
| -        | 43       | <del> </del>    | ├            | <del> </del>   | $\vdash$     | $\vdash$     | ├  | $\vdash$     | $\vdash \vdash$ | $\dashv$ |          | 93       | -            | <u> </u> | $\vdash \vdash$     |            | +        | +             | -       |   | -   | ⊢—       | 143        | $\vdash$  | -        | 4       | 4         | 4            | 4             | 4        | 4        | ᅴ        |
| <b>—</b> | 44       | ├-              | ├-           | <del> </del>   | <u> </u>     | ├            | <del> </del>                                     | -            | $\vdash$        | $\dashv$ | -        | 94       | <u> </u>     | <u> </u> | Н                   |            | -        |               | -       |   | -   | <u> </u> | 144        | $\square$ |          | -       | +         | $\dashv$     | -+            | -        | _        | 4        |
| <u></u>  | 45       | -               |              | ├              | <del> </del> | ⊢            | <del>                                     </del> | $\vdash$     | $\vdash \vdash$ | $\dashv$ | -        | 95       | <u> </u>     | $\vdash$ | $\vdash \vdash$     | -          | -        | +             | +       |   | -   |          | 145        | $\vdash$  |          | -       | +         | -            | $\dashv$      | 4        | $\dashv$ | 4        |
| <u> </u> | 46       | <u> </u>        | <u> </u>     | ⊢              | ⊢            | ⊢            | <u> </u>   | <u> </u>     | $\vdash$        | 4        | -        | 96       | _            | <u> </u> | ${oxed}$            |            | $\dashv$ | -+-           | 4       |   | -   | <u> </u> | 146        |           | _        | +       | +         | 4            | $\dashv$      | -        | $\dashv$ | 4        |
| <u> </u> | 47       | $\vdash$        | <u> </u>     | <u> </u>       | ├            | <del> </del> |  | <u> </u>     |                 |          | -        | 97       | _            | _        | $\vdash$            | _          | -        | 4             | 4       | + | -   | <u> </u> | 147        |           | $\dashv$ | +       | 4         | -            | _             | $\dashv$ | $\dashv$ | _        |
| <u></u>  | 48       | $\vdash$        | <u> </u>     | -              | ⊢            | <u> </u>     | -  |              | $\vdash$        |          |          | 98       |              | <u> </u> | $\vdash \downarrow$ | _          | $\dashv$ |               | +       | + | -   | <u> </u> | 148        | -         | -        | -       | 4         | 4            | _             | -        | -        | _        |
|          | 49       | -               | -            | $\vdash$       | ⊢-           |              | <del>                                     </del> | <b>!</b>     | $\vdash \vdash$ | -        | <u> </u> | 99       |              | <b>—</b> | $\vdash \vdash$     |            | 4        | -             | +       | - | 4   | <u> </u> | 149        |           | _        | +       | 4         | -            | -             |          | _        | 4        |
|          | 50       |                 |              | <u></u>        | L            | <u>L</u>     |  |              |                 |          | L        | 100      | L            |          | Ll                  |            |          | - 1           | $\perp$ |   | ╛   |          | 150        |           |          |         | $\perp$ L |              | l             |          |          |          |